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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,643	04/22/2002	Anthony A Lane	P/61695-PCT	5182

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EXAMINER

LEE, BENNY T

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

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7	

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined

Responsive to communication filed on 27 April 2002  This action is made final.

A shortened statutory period for response to this action is set to expire 1M (3) month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892. 2.  Notice re Patent Drawing, PTO-948.  
3.  Notice of Art Cited by Applicant, PTO-1449 4.  Notice of Informal Patent Application, Form PTO-152  
5.  Information on How to Effect Drawing Changes, PTO-1474 6.  \_\_\_\_\_

Part II SUMMARY OF ACTION

1.  Claims 21-40 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims 1-20 have been cancelled.

3.  Claims 21-28, 32-36; 37, 38; 39, 40 are allowed.

4.  Claims 29-31 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

8.  Allowable subject matter having been indicated, formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are  acceptable;  
 not acceptable (see explanation).

10.  The  proposed drawing correction and/or the  proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been  approved by the examiner.  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved.  disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.

12.  Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  
 been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

EXAMINER'S ACTION

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The disclosure is objected to because of the following informalities: Note that subheadings should be provided to delineate the different portions of the specification. Page 5, line 22, note "Figure 3 shows" should be rephrased as --Figures 3(a), 3(b), 3(c) show-- for a proper characterization. Page 6, line 22, note that a --,-- should follow "1(a)"; line 24, note that -1:n-- should precede "splitter" for consistency with the drawing figure. Page 7, line 2, note that "thence" should be rewritten as --then to--; line 4, note that --(LNA)-- should follow "amplifiers"; line 8, note that --1:n-- should precede "combiner" for consistency. Page 11, line 18, note that a --,-- should follow "array". Page 12, line 14, should "proper" be deleted as being unnecessary. Page 14, lines 1-6 should make reference to --Figure 8-- since the described features relate to such figure.

Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that the following reference labels need explicit description relative to the corresponding drawing figures: figs. 1(a), 1(b) [ $\varnothing_1, \varnothing_2, \varnothing_n, \Phi$ ]; fig. 1(b) [15, receiving elements, LNA, signal processing unit]; fig. 4 (21, 24, 30); figs. 7, 8, 12 (7b); figs. 8, 9 (74); fig. 8 (28, 62); fig. 10 (72); fig. 12 (54).

Appropriate correction is required.

The drawings are objected to because of the following: In fig. 10, reference label --74-- needs to be provided; In fig. 12, note that the dielectric gel needs to be properly cross-hatched as a dielectric material. A proposed drawing correction or corrected drawings are required in reply

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to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 29, it is unclear whether “the waveguide is disposed in the piston” is a proper characterization in view of the claim’s dependency from the subject matter of claim 27.

The following claims have been found objectionable for reasons set forth below:

In claim 21, 37, 39, note that “former” and “latter” should be respectively rewritten to recite the intended features.

In claim 22, note that “its” should be deleted and --thereof-- should follow “surfaces” for clarity.

In claim 25, note that --respective-- should precede “cavities” and “their” should be rewritten as --a--.

In claim 26, note that “made” should be rewritten as --comprised--.

In claims 37, 39, note that --respectively-- should precede “phase-shifted (signals)” and follow “phase-shifting means”, respectively.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wong et al pertains to a dielectric loaded phase shift device.

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Any inquiry concerning this communication should be directed to Benny Lee at telephone number 308-4902.

*Benny Lee*  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

Lee/ek

07/22/03